2013 Louisiana Environmental Education Symposium

PRESENTER LINE-UP DESCRIPTIONS

**Line-up is subject to change.*

The following concurrent sessions are being offered on **Saturday, February 23, 2013** for the 2013 conference.

8:00AM–9:00AM

Get Smart!

Come and participate in several exciting hands-on activities that will pique your students' interest in sustainability. Be prepared to have fun and receive handouts that are 'ready-to-use'!

Rebecca Holloway, EBRP School System

Hands-On ***K-4; 5-8***

Rabbit-Tracking: Looking for Evidence of Wildlife and Interpreting Food Webs

Follow Swamper, the swamp rabbit, as he looks for evidence of other animals in his bottomland hardwood forest ecosystem (aka swamp). Participants will use an Animal Track Identification sheet to identify animal tracks. The session will include the following activities: make a foldable for Learning Log, interpret a food web and follow the energy flow, learn how to make plaster casts of real animal tracks.

Amy Ouchley, ULM (DREAM)

Hands-On ***5-8***

Sediments, Subsidence, and Sea-level Rise: the Elephant in the Wetlands

Participants will model the Louisiana coastline using simple physical and mathematical models provided by the presenters. There will be an interactive discussion of the "elephant in the room": the observed rates of subsidence, sea-level rise, and the present rate of Mississippi River sedimentation which underlie all efforts to restore the Louisiana coastline

Dr. Ivan Gill, University of New Orleans

Hands-On ***5-8; 9-12***

The Science of Service Learning: One School's Journey to Promote Science Knowledge through Service

Learn how Isidore Newman School implemented science-based service learning programs that increase student understanding of coastal issues facing communities in Louisiana. Hear how science teachers in the elementary and middle grades work with community partners to enrich their student knowledge and understanding of wetlands and watersheds.

Jennifer Williams, Isidore Newman School

Hands-On ***General***

WETSHOP – A Coastal Awareness Institute

Want a sneak peek? Open to all science/history teachers, WETSHOP provides 55 hours of professional development and numerous wetlands classroom resources. Unearth the extensive bounty of our coast with a week-long wetland workshop that introduces educators to wetland loss, the importance of Louisiana's shores, and restoration efforts

MattiLynn Dantin, LA Department of Wildlife & Fisheries

Hands-On ***General***

The Environmental Health Student Portal: Resources for Education and Careers

The Environmental Health Student Portal (EHSP) http://kidsenvirohealth.nlm.nih.gov/ was released in 2011 by the National Library of Medicine (NLM) to promote environmental health education and career guidance to students in middle and high school. Discover experiments, readings, homework, activities useful for grades K-12, not just 6-12. Learn about ToxTown, ToxMystery, and other resources

David Duggar, LSU Health Shreveport, Health Sciences Library

Lesson ***5-8; 9-12; General***

9:10AM–10:10AM

Energy Bike Workshop

The Alliance for Affordable Energy is a non-profit that has worked on energy policy for over 25 years. Our new workshop curriculum focuses on introducing young students to the concepts of clean vs. dirty and renewable vs. non-renewable energy sources, and energy conservation. Our workshop incorporates curriculum by the NEED Project and meets several state GLE requirements. The highlight of our workshop is a bicycle generator that students can ride to experience the effort that goes into powering different types of light bulbs and appliances. Come learn about our new fun, interactive curriculum and see the bicycle generator in action!

Julia Michaels, Alliance for Affordable Energy

Lesson K-4

Role-playing to Learn How Shrimp Travel from the Gulf of Mexico to the Boiling Pot

Participants will learn to conduct a role-playing game with their students to teach sustainability concepts through the shrimp life cycle and Louisiana shrimping livelihood. With information cards and string, participants will use reading, math and science skills to learn system interdependence by emphasizing natural inputs required for shrimp to grow and economic factors that influence human consumption of shrimp. We will also look at the effects of natural and man-made disturbances (i.e., hurricanes, oil spills and foreign imports) on the food chain from shrimp to humans.

Lauren Land, Louisiana Sea Grant College Program

Lesson 5-8

Sustainability Education in a World of 7 Billion

Discover innovative, hands-on activities that examine the connections between human population growth, resource consumption and sustainable ecosystems and communities. Presenter will engage participants in memorable games and simulations for use in the classroom or nature center. Receive a CD-ROM of lesson plans matched to state, national and Common Core standards!

Sue Ellen Lyons, Holy Cross School

Hands-On 5-8; 9-12

Classrooms in Motion - The Art of Making Movies for the Classroom

Learn to make movies from all those raw video clips you have taken. Movies are a great way to showcase student stewardship activities, communicate with other teachers or students, demonstrate classroom activities, and much more! A great way to bring STEM into the classroom!

Murt Conover, Louisiana Universities Marine Consortium (LUMCON)

Hands-On General

Modeling the Multiple Lines of Defense for Hurricane Protection

Incorporating hands-on techniques, teachers will use simple materials to see different ways for students to demonstrate the multiple lines of defense strategy for hurricane protection created by the Lake Pontchartrain Basin Foundation.

JoAnn Burke, Lake Pontchartrain Basin Foundation

Hands-On General

Pollinator Partnership Educational Tools and Activities for Teachers and Educators

This is an introduction to the Pollinator Partnership. There will be a discussion about current pollinator status in the U.S. and what you can do to help. The demonstration will walk you through the education portion of our website including a demonstration of our Bee Smart School Garden Kit.

Jennifer Blanchard, Pollinator Partnership -Field Botanist

Hands-On; Lesson General

10:35AM –11:35AM

Environmental Chaos

This session will be presented from a creative perspective. Brainstorming ideas, movement, and collaboration will be "chaotically" explored. The session encompasses creative methods for teaching elementary students to appreciate the environment. Instructional practices that reap high yield results will be embedded in the information given and during the actual presentation. The session is most applicable to teachers that teach grades K-5. Information about starting your own environmental club that challenges students will be explained, resources to use in your classroom will also be given. This session is sure to give you a wealth of ideas…it's like environmental chaos!

Jennifer Thomas, Bale Elementary

Hands-On; Lesson K-4

My Footprint on the Globe: Making Connections!

Ever wonder how your day to day actions affect the planet? I will share activities aimed at making those important connections! Multi-disciplinary lessons will focus on living sustainably, including: making smart food choices, water conservation, and reducing consumption. A Rocket Stove demonstration will also be included. Rocket Stoves can be used as a fun educational tool to show how small lifestyle changes can greatly reduce environmental impact!

Rose Butler, Audubon Nature Institute

Lesson 5-8

Using (GPS) and (GIS) technologies to teach about the local environment

We can capitalize on students' aptitude for technology to increase environmental appreciation and literacy. We will show you how to use mobile GPS-enabled devices to teach map skills and to collect and organize environmental data. Receive up-to-date user-friendly resources for incorporating GPS and GIS into classroom and field-based science projects.

Dinah Maygarden, University of New Orleans

Lesson 5-8; 9-12

Island Time: Learning about Louisiana's Barrier Islands

Barrier islands provide essential habitat and offer protection against storm surge. Learn about how barrier islands are formed off the coast of Louisiana. Other topics will include barrier island anatomy, the delta lobe cycle, forces effecting barrier islands, and much more. Participants will also do a hands-on mapping activity to demonstrate the migration of barrier islands.

Murt Conover, Louisiana Universities Marine Consortium (LUMCON)

Hands-On General

Particulate Air Pollution and its Effect on Human Health

Air pollution can have serious effects on human health. This session will focus on how fine particles produced by incineration and other combustion processes, are transported through the atmosphere and taken into the body, with potential effects on the respiratory and circulatory systems.

Maud Walsh, LSU Superfund Research Program

Hands-On K-4; 5-8; 9-12

Grant Writing Tips

Do you want to write grants that can be funded to get additional materials and equipment for your classroom or a special event? Information will be presented on writing quality grant proposals/applications. Tips and examples will be given on determining and providing the correct, complete information requested in grant applications or requests for proposal (RFP).

Ann Wilson, LA Department of Education

Exemplary General

11:45AM –12:45PM

Let's Talk Trash! - Start a Debris Removal Project to Build a more Sustainable School & Community

Students can become a part of the solution to stop the harm animals receive from debris entanglement, debris strangulation and ingestion of plastics that maim and kill. Lesson Plans and Hands on Activities engage students in a Marine or Land Debris Removal campaign! We'll tear into diapers, melt Styrofoam and see what really makes up the plastic that is in our trash. Students use scientific inquiry, observations, data collection and analyzing to become Environmental Warriors!

Sandra Saye Foucqueteau, Upper Point Coupee Elementary
Lesson K-4; 5-8

Got Bot?

Even with a steady exposure to modern technology, many children still do not develop an interest in science and industrial technology that carries over into their adulthood. Fostering learning in the STEM subjects (science, technology, engineering, and math) children explore the use and function of robotics, specifically underwater robotics, in today's workplace.

Jeanne Brooks, Lake Pontchartrain Basin Foundation
Exemplary 5-8

Teaching and Assessing 21st Century skills in the Environmental Science Classroom

Environmental science offers many opportunities to develop college and career readiness through 21st century skills such as critical thinking, communication, collaboration, and creativity. This presentation will include examples of student-driven projects exploring water quality, island biogeography, invasive species, coastal restoration, mining and land use.

Janell Simpson, Patrick F. Taylor Science & Technology Academy
Lesson 9-12

What does Education for Sustainability mean for your classroom?

Participants will begin with discussing different perspectives and common elements of sustainability. Then, we will learn about Education for Sustainability as defined by the Vermont Sustainable Schools Project and the U.S. Partnership for Education for Sustainable Development. We will end with conducting a "Quality of Life" classroom activity in which teachers learn how to engage students in identifying the environmental, economic and social dimensions of features necessary for healthy communities.

Lauren Land, Louisiana Sea Grant College Program
Hands-On General

New Methods of Student Inquiry into Climate Change

What was earth's climate like in the past? How will climate change affect Louisiana? What resources are available for student investigations into climate? Explore answers to these and other questions using a newly-developed easy-to-use online tool called GeoMapApp. Emphasis on student inquiry, research skills, and creation of geospatial imagery

Steve Babcock, LSU Laboratory School
Lesson 9-12; General

The Bear Facts on the Louisiana Black Bear

Once a common inhabitant of forested areas in east Texas, Louisiana, and southern Mississippi, the Louisiana black bear was listed as threatened under the Endangered Species Act on January 7, 1992.The presentation will follow the journey of the Louisiana's black bears' road to recovery and will include general species information, current population numbers, information, etc.

Carrie Salyers, LA Department of Wildlife & Fisheries
Exemplary General

The following 2012 Environmental Education Research Grant recipients will be showcasing their research projects in the Exhibit Hall on **Friday, February 22nd**.

2012 Grant Recipient Showcase

Latitudinal gradients in tritrophic interactions between arthropod herbivores of Phragmites australis and their natural enemies by Warwick Allen
Our research examines how the strength of tritrophic (plant-herbivore-natural enemy) interactions varies with latitude and plant genotype, and the possible influence of these trends on the invasion success of Phragmites australis and other widespread invasive species. Research is conducted using observational and experimental studies in both the laboratory and field.

Apparent competition between native and exotic genotypes of Phragmites australis and implication for invasion success by Ganesh Bhattarai
I am conducting a field experiment to examine if the exotic genotype of Phragmites causes increased herbivory in native genotypes and if that varies with latitude. The consequence of increased herbivory on native plants is examined in a complimentary common garden experiment. My study will help understanding the invasion of coastal wetlands by the Eurasian genotype of this species.

Differences in physiological traits between different haplotypes of Phragmites australis by Anthony Chow
Phragmites australis, a common wetland species, is both a native and invasive species in North America. In addition to native haplotypes of Phragmites, there are also two introduced, non-native haplotypes. The results from my research demonstrate significant differences in the physiological traits between native and introduced haplotypes of Phragmites australis.

Isolation and Characterization of Phages of Agrobacterium tumefaciens by Brittany Miller
Bio-control can protect a plant against pests, as an alternative to pesticides, eliminating the contamination of the ecosystem by harmful chemicals. Our lab is interested in the use of phage therapy as a means to control crown gall disease caused by Agrobacterium tumefaciens, obviating the need for pesticides.